

DATA SCIENTIST

Ian Gregory, PhD(Math)



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- driangregory.github.io

Technical Skills

- Machine Learning** ●●●● Good
- Financial Mathematics** ●●●● Advanced
- Programming:**
Analytics: Python (PyTorch, Keras, Scikit-learn, Tensorflow, Seaborn, Jupyter, PyCharm), Matlab, R, Mathematica. ●●●● Good
- SQL: SQL Server, Postgres, MySQL, MongoDB. ●●●● Good
- Cloud: Google Cloud, AWS, Heroku. ●●●● Good
- Core Languages: VBA, C#.NET, C++, VBScript, Git, Jira, Confluence, Redmine. ●●●● Good
- Finance Data
Providers: Bloomberg, Reuters, IRESS, BARRA. ●●●● Advanced
- Operating Systems:**
Windows, Linux. ●●●● Advanced
- Report Writing & presentations:**
Word, PowerPoint, Excel, Latex (Beamer, TeXnicCenter). ●●●● Expert

Personal Interests

Gym, outdoor activities (downhill mountain biking, canyoning, cycling), algorithmic trading, home automation, IoT, natural language processing (NLP), Japanese Language: JLPT N3.5.

EDUCATION

- 2010 ● **Ph.D.(Mathematics)**
2006 Sydney University Sydney, Australia
Thesis title: "Large scale simulations in mathematical finance, with application to asymptotic statistics, pairs trading and CPPI". Advisor: Professor Oliver Ewald.
- 2001 ● **Master of Quantitative Finance**
2000 Curtin University Perth, Australia
- 2000 ● **BSc(Physics)**
1996 Curtin University Perth, Australia

RELEVANT EXPERIENCES

- 2018 ● **Data Scientist, Trader**
2016 SBI Securities Tokyo, Japan
● Team of 15. Created equities proprietary quantitative trading division.
● Head of desk and used my quantitative analysis for proprietary trading (UI/risk/algo/attribution).
- 2016 ● **Data Scientist**
2014 Bloomberg Sydney, Hong Kong, Singapore, Tokyo
● Client management and analyse Bloomberg data and create quantitative tools throughout APAC for clients.
- 2013 ● **Data Scientist**
2012 ANZ Bank Sydney, Australia
● High profile project reporting to the board of directors to alter the balance sheet and general ledger through data gathering, analysis and programming.
- 2009 ● **Data Scientist**
2008 Credit Suisse Sydney, Australia
● High profile project replacing the back office and front office systems.
- 2008 ● **Data Scientist**
2006 Perpetual Sydney, Australia
● Created a new structured products division. US\$900m raised in 3 tranches at 9% loan book with projected revenues of \$250m over 7 years.
● High profile project reporting to board of directors.
- 2006 ● **Data Scientist & Trader**
2004 Macquarie Bank Sydney, Tokyo, New York
● Created and head of proprietary quantitative trading division using the latest quantitative trading techniques.
- 2004 ● **Data Scientist & Trader**
2002 ABN AMRO Sydney, Australia
● Created a proprietary quantitative trading division using the latest quantitative trading techniques.

EXAMPLE PROJECTS

- **Support Vector Machines from Scratch**
<https://github.com/DrlanGregory/MachineLearning-SupportVectorMachines>
My GitHub project where I implement Support Vector Machines from scratch in Python.
- **Analytical Pairs Trading Under Different Assumptions on Spread and Ratio Dynamics.**
https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1663703
Research paper showing optimal relative value trading derived using stochastic calculus.